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ESTIMATED U.S. PETROLEUM BALANCE

SUMMARY

During November, amidst signs of continued strong recovery of economic activity, estimated total domestic products supplied exceeded year-earlier levels by 3.3%. Light products accounted for the gain, distillates alone contributing more than 80% of the total 502 MBD increase. "Other oils", recently on an upward trend, also showed an increase. Residual fuel oil demand levels, however, continued to lag.

Crude oil production in November was about 60 MBD below year-ago levels as result of decreased lower 48 production. Imports fell below November's unusually high level. Inventories rose about 6 million barrels over last month, closely in line with seasonal expectations. Rig activity continued to improve, the monthly average moving ahead of the prior year for the first time since early 1982. Wells reported drilled were almost 9% below last November's level but, seasonally adjusted, exceeded the recent-year low, set in August, by about 10%.

RECENT DEMAND AND INVENTORY TRENDS-U.S. VERSUS OTHER O.E.C.D. COUNTRIES

Recent demand and inventory patterns in the United States appear to differ markedly from the remainder of the countries comprising the O.E.C.D. group. Using just-released International Energy Agency and Department of Energy data, it appears that, while demand in the United States rose about 2% during the third quarter compared with last year, demand continued to be lower than a year ago in the rest of the O.E.C.D. countries combined. This is in agreement with indicators of economic activity which show the U.S. economy recovering at a much faster pace than is the case in O.E.C.D. countries as a whole. Industrial production, for example, only about 2% higher at midyear than at the end of 1982 for European O.E.C.D. members and 3% for Japan, had already risen by some 8% in the U.S. in that time period and more than 10% in Canada. Similar differences are likely to have extended into the third quarter.

As Exhibit I shows, there have also been wide divergences in inventory handling. While U.S. inventories seem to have stabilized, the inventories of other O.E.C.D. countries are apparently still undergoing downward movement. The differences also showed up in third-quarter statistics. While the United States added a roughly-normal 0.6 million barrels per day to inventories in the third quarter, the other O.E.C.D. countries' stock levels changed little, though that portion of O.E.C.D. inventories normally increases approximately 1 1/2 million barrels per day in the third quarter. As a result, the graph depicts a substantial seasonally-adjusted decline. In addition to the slow demand recovery, the soaring dollar, payment basis for all oil purchases, likely was a factor in holding down inventory levels.

PRODUCTS SUPPLIED[1A]

Gasoline supplied in November was 1.5% (96 MBD) ahead of last year, continuing the consistent improvement over prior-year levels that has persisted over the past several months. Lower gasoline prices and rising disposable personal income continue to be the main factors in this demand increase. Inflation-adjusted gasoline pump prices have now fallen uninterruptedly since mid-July, reaching a level some 4 1/2% (about 6¢) below last year despite an increase of more than 6¢ in federal, state, and local taxes. Real personal disposable income, rising about one percent in October over the prior month, is now almost 5% ahead of last year.

Unleaded gasoline's market share was 55.8% in November. With a roughly 3 1/4 percentage point advance over last year, it maintained about the same pace of year-to-year increases it has experienced for most of the year. Increases in new car sales seem to have abated and are only gradually affecting the total fleet's need for unleaded gasoline. However, those cars entering the fleet have considerably better fuel efficiency. In fact, if 1983 experienced an improvement in fuel efficiency over the prior year even close to 1982's, cars would be using some 17-18% less fuel per mile now than in 1978. However, part of that saving is likely to have been offset by the tendency to increase travel when unit costs per mile fall.

Distillates supplied showed a 413 MBD (16.7%) increase over last November. More than a third of the increase is due to strong gains in truck and railroad traffic, up about 14% and 11%, respectively, over year-ago levels. Construction spending in October receded somewhat from its seasonally-adjusted recent-period high, set in September, but is still significantly larger than last year, increasing off-highway diesel demand. The effect on total distillate demand, however, is small. This is also true for the remaining non-heating uses. Thus, filling of secondary storage, previously delayed, appears to be responsible for the bulk of the remainder of the distillate increase. Monthly inventory-related departures from the deseasonalized trend, such as apparently took place in October and November, do not, however, disturb the general direction of distillate demand, which, over the past 12 months, has experienced a significant upward movement.

Residual fuel oil demand patterns continue to be puzzling. November deliveries fell 267 MBD (17.2%). The strength of the economy, at minimum, should have helped to lessen year-to-year declines, especially in the industrial sector. However, residual fuel oil prices, despite some recent erosion, have continued to be at relatively high levels, discouraging switchback to residual fuel oil. In the electric utility sector, weather also played a major role. The unusually warm summer caused electric utilities to use substantial quantities of residual fuel oil as a readily-available incremental fuel source, swinging year-to-year comparisons of use at utilities into the plus column. The practice lessened toward the end of the summer, and preliminary September data show only a minor current-year increase. There is thus reason to believe that electric utilities, with the return of more normal weather, may have reverted to the fuel usage pattern of early 1983, when sizable year-to-year residual fuel oil deficits were incurred. A small deficit, perhaps 25-30 MBD, occurred in the bunker fuel sector as worldwide shipping has been recovering only gradually.

For the first 9 months, kerosene jet fuel deliveries were about 3% greater than last year, while "miles flown" increased about 5%. With air traffic continuing to show year-to-year increases in October and November, and kerosene jet fuel deliveries rising 3% and 6% in October and November, respectively, the ratio of jet fuel usage to "miles flown" is likely to have remained roughly the same. As a result, the airlines continue to effect fuel efficiency improvements, though reduced acquisition of new planes may have slowed the pace.

"Other oils" showed a 165 MBD (4.6%) increase in November compared with last year, following a small increase in October. For the year to date, however, "other oils" supplied levels still trail last year by almost 100 MBD. More than 40% of the category covers natural gas liquid products and liquefied gases; the remainder consists of petrochemical feedstocks, asphalt, lubricants, and an array of miscellaneous petroleum products. Attached Exhibit II shows the trend of these two segments from January 1981 through September 1983. While both segments benefited in 1983 from the economic recovery, the non-NGL sector's rebound started earlier and was more pronounced. Revival of the chemical industry and related manufacturing activities played a large role. Greater road building and maintenance activities, funded by the April 1 increase in motor fuel taxes, also contributed to the turnaround.

(In millions of B/D)	NOVEMBER ESTIMATES			YEAR-TO-DATE ESTIMATES		
	1983	1982	% Change	1983	1982	% Change
—Total domestic products supplied	15.5	15.0	3.3	15.1	15.3	(1.5)
—Motor gasoline supplied	6.7	6.6	1.5	6.6	6.5	1.0
—Distillate fuel oil supplied	2.9	2.5	16.7	2.6	2.6	(0.9)
—Residual fuel oil supplied	1.3	1.5	(17.2)	1.4	1.7	(17.5)

SUPPLY[1/]

Total supply was minimally below last November's level, as a 408 MBD decrease in imports was almost fully offset by a 373 MBD increase in total domestic supply.

Crude oil production decreased about 60 MBD in November from year-ago levels, as a result of a roughly 100 MBD decline in lower 48 production, essentially accounted for by lower output in Texas. This decline was partially offset by growing Alaskan output. However, total production is still about 1.1 million barrels per day higher than the level that would likely have prevailed, had the declines of the seventies continued.

Imports fell 408 MBD (7.3%) below last November's level. The comparison with last year is somewhat misleading, however, as last November had the second-highest import level of the year, exceeding the average of the prior three months by almost 500 MBD on a seasonally-adjusted basis. However, imports, while showing a decline of about 7% from the seasonally-adjusted level prevailing during the quarter ending in September, have still grown at a rate of about 4% per month since early 1983.

During September, the latest month for which data are available, Mexico continued to hold the top position of exporters to the United States, a rank which it has maintained throughout 1983. Saudi Arabia was second, followed by Canada, Indonesia, Venezuela and the United Kingdom (the latter two in a tie). These countries accounted for more than half of total imports. This is the first time this year, however, the Saudi Arabia placed second. Imports from that country averaged about 180 MBD during the first seven months of the year with the figure more than doubling in August and tripling in September. As imports increased, recourse had to be taken to those sources where crude was readily available even though transport costs were slightly higher. Thus, it is not at all surprising that part of the growth in imports occurred in the Persian Gulf states.

With lower exports adding about one percentage point, November's rate of dependency on foreign sources on a "net imports" basis was 29% compared with about 32% last year.

Inventories rose about six million barrels in November, about in line with seasonal expectations. Gasoline stocks rose 10 million barrels from October levels, while distillate inventories rose 2 million barrels, both occurrences approximately in line with the experience of the mid-seventies. Gasoline inventories, at 35 days of supply, were also in line with the average since the mid-seventies. Distillate stocks, at 57 days of supply, are considered adequate, as crude inventories are well above minimum needs and available refinery capacity is ample. The current level of distillate stocks, while below last year, is about 25 million barrels above the estimated 140 million barrel pre-season minimum described in the August Monthly Statistical Report.

Over the past few years, high interest rates and other costs of holding inventories have forced close scrutiny of inventories, resulting in gradual reduction of inventory levels. This has also affected other business sectors. Attached Exhibit III compares inventory/sales ratios for manufacturing as whole with those of the petroleum industry since 1970. It is interesting to note that there is a high degree of correspondence between the movements of these ratios throughout economic cycles, though the ratio for the petroleum industry has remained considerably higher than for manufacturing as a whole.

Input to crude oil distillation units was about 100 MBD (0.8%) ahead of last November, though, as a result of decreased operable capacity, the utilization rate increased by more than 4 percentage points; it, in fact, rises into the low 80's, if only capacity in actual operation is used as base.

Drilling activity continues to show mixed results. The active rig count has been increasing steadily, and, seasonally adjusted, was about one-third higher in November than the April low and about 3% ahead of last year. Wells reported drilled, while still below last year's level, have risen some 10% from their seasonally-adjusted August low.

(In millions of B/D)	NOVEMBER ESTIMATES			YEAR-TO-DATE ESTIMATES		
	1983	1982	% Change	1983	1982	% Change
—Total supply	16.3	16.4	(0.2)	15.7	15.8	(0.6)
—Crude production[2/]	8.6	8.7	(0.7)	8.7	8.7	0.1
--Crude oil imports[3/4/]	3.3	3.7	(11.3)	3.1	3.4	(7.8)
--Product imports	1.9	1.9	0.5	1.7	1.6	3.3

1/ Total supply, i.e., production plus imports adjusted for net stock change is equal to total products supplied from primary storage. Total products supplied from primary storage less exports is equal to total domestic products supplied. Information contained in this report is derived from information published in the API Weekly Bulletin and is based on historical analysis of the industry. All data reflect the most current information available to the API and include all previously published revisions.

2/ Includes lease condensate.

3/ Beginning with January 1977, the U.S. Department of Energy began reporting crude oil imports as of the date of importation. Previously, this data, with the exception of Canadian crude imports, was reported as of the date it was received at the refinery. This change may affect both the level of crude oil imports and crude oil stocks. API estimates of these data may, therefore, differ slightly from those of the U.S. Department of Energy.

4/ API data do not include crude oil imported for the Strategic Petroleum Reserve (SPR) nor crude oil stocks held in the SPR (according to the U.S. Department of Energy, the SPR held approximately 371 million barrels as of November 30, 1983).

ESTIMATED UNITED STATES PETROLEUM BALANCE

(Daily Average in Thousands of 42 Gallon Barrels)

Supply/Products Supply From Primary Storage	NOVEMBER			YEAR-TO-DATE		
	1983[1]	1982[2]	% Change	1983[3R]	1982[2]	% Change
Products Supplied:						
Total motor gasoline	6,671	6,575	1.5	6,603	6,539	1.0
Finished leaded motor gasoline*	2,951	3,124	(5.5)	2,992	3,137	(4.6)
Finished unleaded motor gasoline*	3,720	3,451	7.8	3,611	3,402	6.1
Naphtha-jet	222	210	5.7	207	208	(0.5)
Kerosine-jet	892	845	5.6	828	800	3.5
Distillate fuel oil	2,880	2,467	16.7	2,621	2,644	(0.9)
Residual fuel oil	1,281	1,548	(17.2)	1,384	1,678	(17.5)
All other oils[4]	3,778	3,613	4.6	3,582	3,679	(2.6)
Reclassified[5]	- 211	- 247	(14.6)	- 169	- 267	(36.7)
Total domestic products supplied	15,513	15,011	3.3	15,056	15,281	(1.5)
Exports	640	786	(18.6)	752	811	(7.3)
Total products supplied	16,153	15,797	2.3	15,808	16,092	(1.8)
Supply:						
Domestic production:						
Crude oil[6]	8,635	8,697	(0.7)	8,662	8,653	0.1
Natural gas liquids	1,600	1,609	(0.6)	1,555	1,543	0.8
Other supply[7]	951	507	87.6	734	640	14.7
Total domestic supply	11,186	10,813	3.4	10,951	10,836	1.1
Imports:						
Crude oil, total	3,265[10/]	3,683[10/]	(11.3)	3,101[10/]	3,365[10/]	(7.8)
Canadian	306	244	25.4	270	211	28.0
Other	2,959	3,439	(14.0)	2,831	3,154	(10.2)
Products, total	1,892	1,882	0.5	1,681	1,627	3.3
Residual fuel oil	790	836	(5.5)	705	778	(9.4)
Other	1,102	1,046	5.4	976	849	15.0
Total imports	5,157	5,565	(7.3)	4,782	4,992	(4.2)
Total supply	16,343	16,378	(0.2)	15,733	15,828	(0.6)
Stock change, all oils	+ 190	+ 581	XXXX	- 75	- 264	XXXX
Refinery Operations						
Input to crude oil distillation units	12,238	12,145	0.8	11,960	12,197	(1.9)
Operable capacity	16,309	17,193	(5.1)	16,674	17,465	(4.5)
Refinery utilization (%)[8]	75.0%	70.6%	6.2	71.7%	69.8%	2.7
Crude oil runs	12,016	11,724	2.5	11,713	11,798	(0.7)

Stocks (millions bbls.)	1983		1982[2]	% Change from ...	
	Nov. 30[9]	Oct. 31[9]	Nov. 30	Previous Month	Year Ago
Crude oil 10/	349.1	350.1r/	357.6	(0.3)	(2.4)
Unfinished oils	109.0	112.0r/	111.8	(2.7)	(2.5)
Total motor gasoline**	235.8	226.0	230.1	4.3	2.5
Finished leaded motor gasoline*	95.9	92.2	95.6	4.0	0.3
Finished unleaded motor gasoline*	99.6	94.2	93.7	5.7	6.3
Naphtha-jet	6.2	6.7	6.1	(7.5)	1.6
Kerosine-jet	36.5	36.9	34.5	(1.1)	5.8
Distillate fuel oil	165.0	162.9	185.6	1.3	(11.1)
Residual fuel oil	51.6	48.1	66.4	7.3	(22.3)
All other oils	189.9	194.7r/	173.1	(2.5)	9.7
Total all oils	1,143.1	1,137.4r/	1,165.2	0.5	(1.9)

1/ Based on API estimated data converted to a monthly basis.
2/ Source: U.S. Department of Energy.
3/ Source: January-September, U.S. Department of Energy, October-November, API.
4/ Includes crude losses.
5/ Beginning with January 1981, U.S. Department of Energy began using a new data collection system which encompasses a method to ascertain the amount of product reclassified during the production phase. So that there will be no double counting of these volumes, they are subtracted from total domestic products supplied.
6/ Includes lease condensate.
7/ Includes Unaccounted-for crude oil, Refinery input of other hydrocarbons, and Processing gain.
8/ Represents "Input to crude oil distillation units" as a percent of "Operable capacity."
9/ Derived by interpolating API weekly stocks data.
10/ Data do not include oil imported for the Strategic Petroleum Reserve (SPR) nor crude oil stocks held in the SPR.
R/ Revised.
* Included in motor gasoline.
** Includes finished leaded, finished unleaded, and motor gasoline blending components stocks.

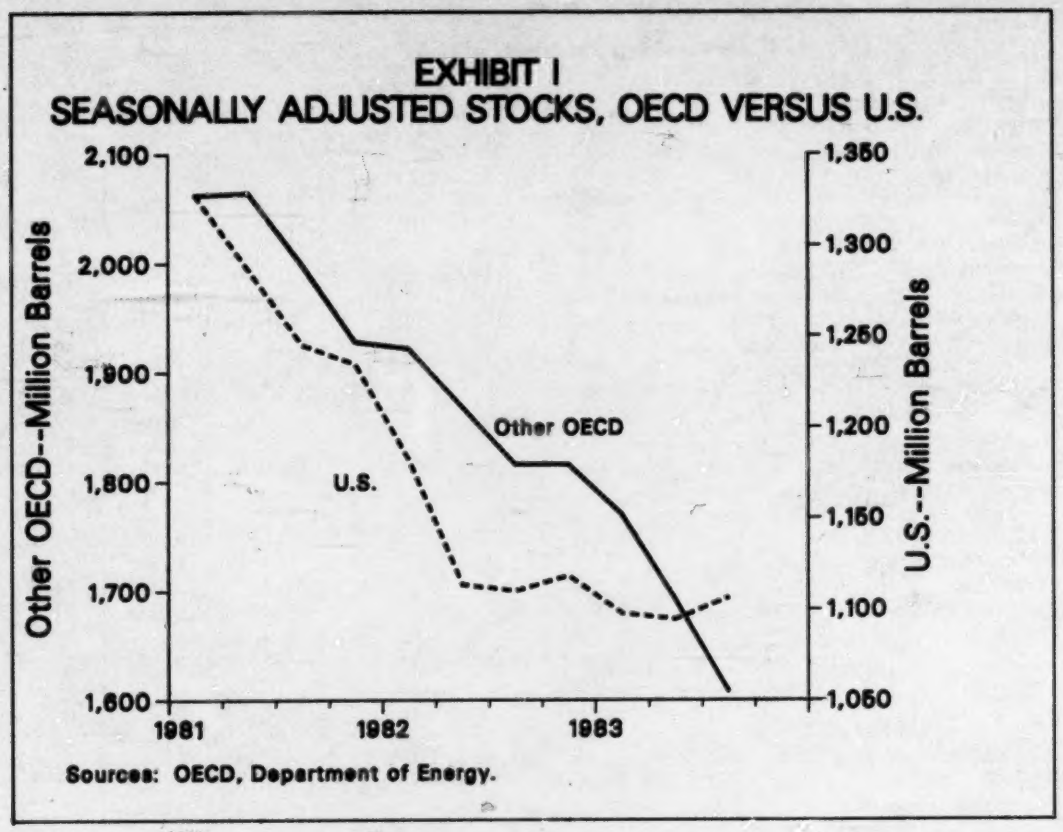


EXHIBIT I
SEASONALLY ADJUSTED STOCKS, OECD VERSUS U.S.
Other OECD--Million Barrels
U.S.--Million Barrels
2,100
2,000
1,900
1,800
1,700
1,600
1,350
1,300
1,250
1,200
1,150
1,100
1,050
Other OECD
U.S.
1981
1982
1983
Sources: OECD, Department of Energy.

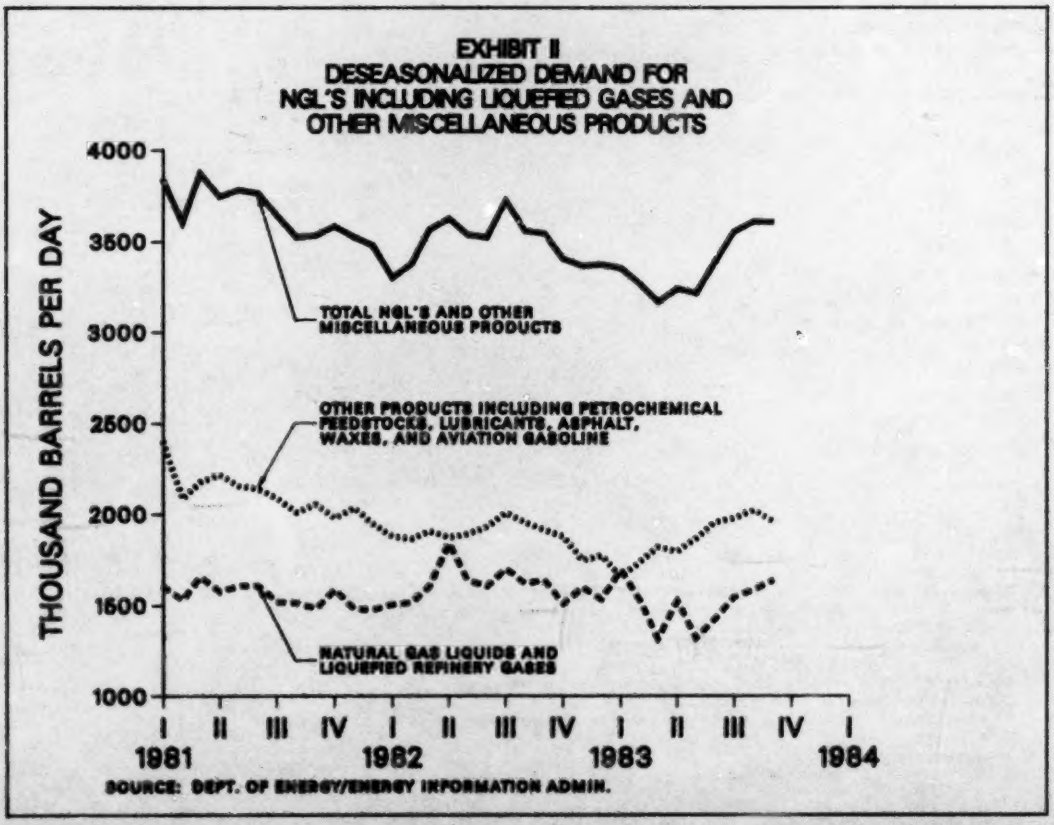
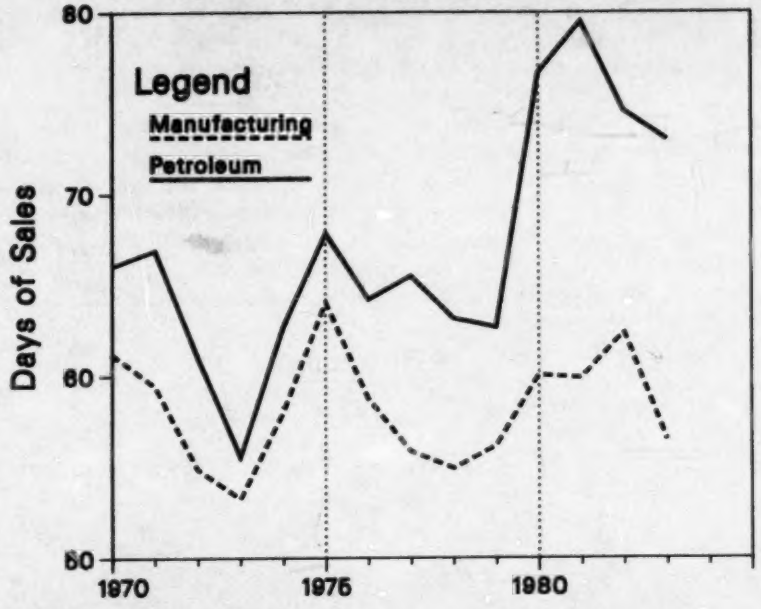


EXHIBIT II
DESEASONALIZED DEMAND FOR
NGL'S INCLUDING LIQUEFIED GASES AND
OTHER MISCELLANEOUS PRODUCTS
THOUSAND BARRELS PER DAY
4000
3500
3000
2500
2000
1500
1000
TOTAL NGL'S AND OTHER MISCELLANEOUS PRODUCTS
OTHER PRODUCTS INCLUDING PETROCHEMICAL FEEDSTOCKS, LUBRICANTS, ASPHALT, WAXES, AND AVIATION GASOLINE
NATURAL GAS LIQUIDS AND LIQUEFIED REFINERY GASES
I II III IV I II III IV I II III IV I
1981
1982
1983
1984
SOURCE: DEPT. OF ENERGY/ENERGY INFORMATION ADMIN.

EXHIBIT III
INVENTORY/SALES RATIOS



Note: Data are annual averages.
Sources: Department of Commerce, Department of Energy, American Petroleum Institute